

CLAIMS

- 1 1. A method of producing a wound roll from an elongated strip, the method comprising:
 - 2 a) deforming the strip in a plurality of discrete locations along the strip's length to
 - 3 form a plurality of spacers on the strip;
 - 4 b) positioning at least one elongated wire on the strip;
 - 5 c) winding the strip and said at least one wire around a rotatable take-up spool,
 - 6 thereby forming strip layers where portions of the strip are wound over previously
 - 7 wound portions of the strip with said at least one wire interposed between
 - 8 adjacent layers of the strip; and
 - 9 d) removing said at least one wire.
- 1 2. The method in accordance with claim 1, wherein said at least one wire is positioned
- 2 on the strip near a lateral strip edge.

1 3. The method in accordance with claim 2, wherein said at least one wire further
2 comprises first and second wires, and the method further comprises positioning said first
3 wire near the lateral strip edge and positioning the second wire near a second, opposite
4 lateral strip edge.

1 4. The method in accordance with claim 3, wherein the step of removing the wires
2 further comprises pulling the wires laterally from between the strip layers.

1 5. The method in accordance with claim 4, wherein the wires have a diameter
2 substantially equal to a spacer height, and wherein the spacers of each strip layer seat
3 against an adjacent strip layer, thereby spacing the layers from one another between said
4 wires.

1 6. The method in accordance with claim 5, wherein the spacers are bumps.

1 7. The method in accordance with claim 5, wherein the spacers are tabs.

1 8. A method of producing a wound roll from an elongated strip, the method comprising:
2 a) extending the elongated strip through a forming tool;

3 b) winding the elongated strip around a rotatable take-up spool downstream of the
4 forming tool;

5 c) rotating the take-up spool through a predetermined angle that is a fraction of a
6 complete rotation of the take-up spool, thereby advancing the elongated strip
7 through the forming tool a predetermined distance that is a function of the
8 predetermined angle, stopping the take-up spool and then actuating the forming
9 tool to deform the strip locally to form at least one spacer on the strip;

10 d) repeating step c) until the take-up spool has been rotated about 360 degrees,
11 rotating the take-up spool through the predetermined angle plus an offset angle to
12 advance the elongated strip through the forming tool a distance that is different
13 from the predetermined distance, stopping the take-up spool and then actuating
14 the forming tool to deform the strip locally to form at least one spacer on the strip;
15 and

16 e) repeating steps c) and d) for a plurality of complete rotations of the take-up spool,
17 thereby forming layers of the elongated strip where a portion of the elongated
18 strip is wound around the take-up spool over a previously wound portion of the
19 elongated strip, for inhibiting alignment of spacers on adjacent layers.

1 9. The method in accordance with claim 8, further comprising:

- 2 a) positioning at least one elongated wire on the strip upstream of the take-up spool
- 3 and then winding the strip and said at least one wire around the take-up spool with
- 4 said at least one wire interposed between adjacent layers of the strip; and
- 5 b) removing said at least one wire.

1 10. The method in accordance with claim 9, wherein said at least one wire is positioned
2 on the strip near a lateral strip edge.

1 11. The method in accordance with claim 10, wherein said at least one wire further
2 comprises first and second wires, and the method further comprises positioning said first
3 wire near a first lateral strip edge and positioning the second wire near a second, opposite
4 lateral strip edge.

1 12. The method in accordance with claim 11, wherein the step of removing the wires
2 further comprises pulling the wires laterally from between the strip layers.

1 13. The method in accordance with claim 12, wherein the wires have a diameter
2 substantially equal to a spacer height, and wherein the spacers of each strip layer seat
3 against an adjacent strip layer, thereby spacing the layers from one another between said
4 wires.

1 14. The method in accordance with claim 13, wherein the spacers are bumps.

1 15. The method in accordance with claim 13, wherein the spacers are tabs.